

ApexRay

3D Printed Resin Dental Product Catalog



Dental Models

Dental-grade resin for high-precision 3D printed models. Fast curing, high accuracy, hard surface. Superior detail reproduction, dimensional stability, and premium finish—meeting high-precision requirements.

- ✓

Used for orthodontics
- ✓

High temperature resistant, non-deformable
- ✓

Fast molding speed
- ✓

Size stable, no warping

BASIC PERFORMANCE TABLE

Test Items	unit	Test Standards	values
Bending strength	MPa	ASTM D790	72.2~80.2
Flexural modulus	MPa	ASTM D790	1300~1521
Hardness	Shore D	ASTM D2240	95D
Notched impact strength	J/m	ASTM D256	32~49
Linear shrinkage rate	%	ASTM D955	0.8



Dental Implant Model

Maintains the high accuracy and key properties of standard dental model resin, with excellent scratch resistance. Ideal for modular dental models that require frequent insertion and removal, such as practice and teaching models. Leaves no powder after scratching.

- ✓

For dental implants
- ✓

High dimensional accuracy
- ✓

Scratch-resistant
- ✓

Size stable, no warping

BASIC PERFORMANCE TABLE

Test Items	unit	Test Standards	values
Bending strength	MPa	ASTM D790	75.1~82
Flexural modulus	MPa	ASTM D790	1500~1531
Hardness	Shore D	ASTM D2240	95D
Notched impact strength	J/m	ASTM D256	32~49
Linear shrinkage rate	%	ASTM D955	0.5



Dental Casting

Zero-ash, clean-burnout wax-filled photopolymer for reliable casting. Captures intricate details and smooth surfaces. Requires phosphate-based standard embedding compound to restore precise surface structure.

- ✓

Used for crowns, veneers, inlays, etc.
- ✓

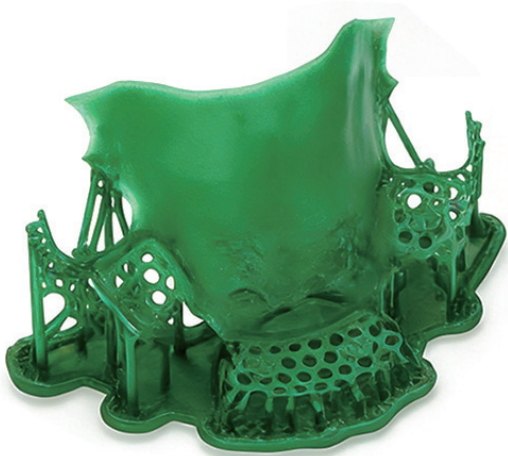
Ashless
- ✓

Easy casting
- ✓

Dimensional stability

BASIC PERFORMANCE TABLE

Test Items	unit	Test Standards	values
Bending strength	MPa	ASTM D790	63.7~70.3
Flexural modulus	MPa	ASTM D790	1100~1200
Hardness	Shore D	ASTM D2240	95D
Notched impact strength	J/m	ASTM D256	32~49
Linear shrinkage rate	%	ASTM D955	0.8



Temporary Crown

biocompatible, tooth-colored for LCD/DLP 3D printers. Prints at 50μm layer resolution, delivering precise-fitting temporaries with smooth surface, high resolution, and dimensional stability.

- ✓

Temporary crowns, dental bridges
- ✓

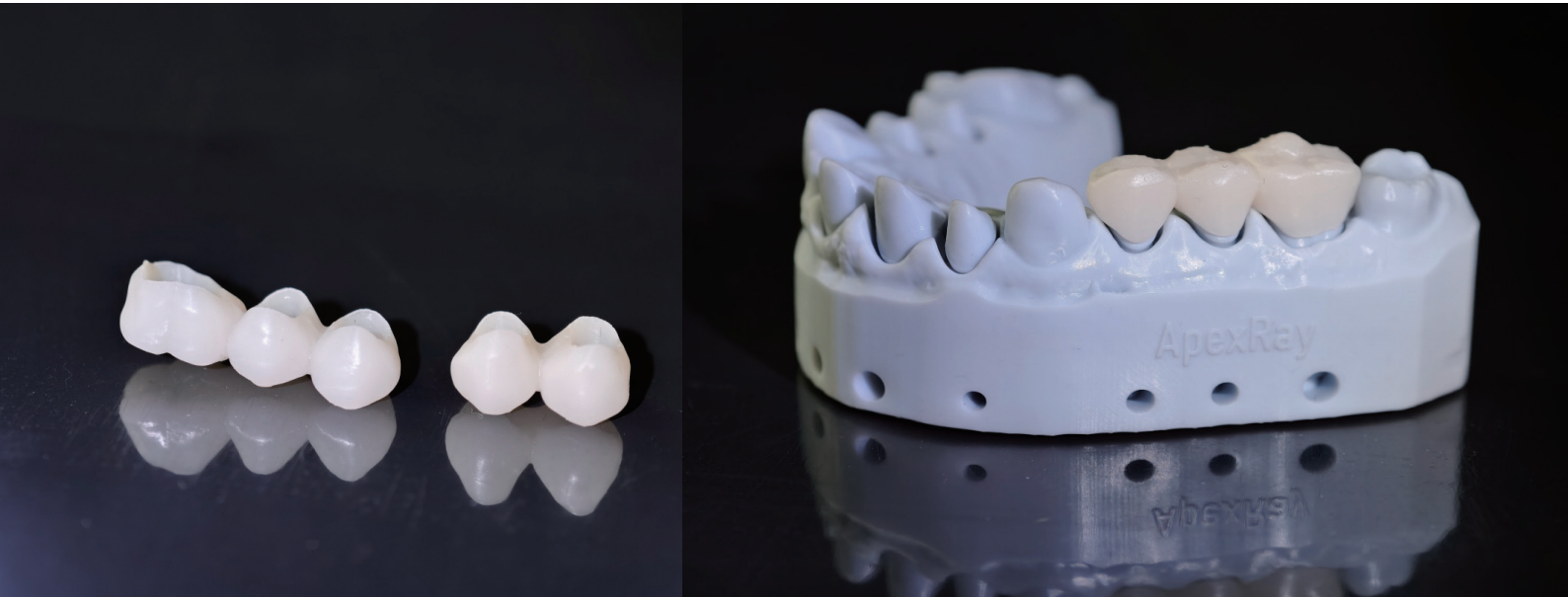
Natural color
- ✓

High strength
- ✓

Low water absorption

BASIC PERFORMANCE TABLE

Test Items	unit	Test Standards	values
Bending strength	MPa	ASTM D790	80.3~85.3
Flexural modulus	MPa	ASTM D790	1400~1500
Hardness	Shore D	ASTM D2240	85D
Water absorption rate	%	EN ISO 10477	2~3.2
Linear shrinkage rate	%	ASTM D955	0.8



Ceramic Crowns

70% nanoceramic reinforced, radiopaque, high hardness ($\geq 95D$) & flexural strength ($\geq 170MPa$) for durable, high-stability dental crowns and bridges.

- ✓

X-ray visible
- ✓

Highest strength 170Mpa
- ✓

70% nano-ceramics
- ✓

Rapid prototyping 1.5s/layer

BASIC PERFORMANCE TABLE

Test Items	unit	Test Standards	values
Bending strength	MPa	ASTM D790	170
Flexural modulus	MPa	ASTM D790	3800~4600
Hardness	Shore D	ASTM D2240	95D
Water absorption rate	%	EN ISO 10477	1~2.2
Linear shrinkage rate	%	ASTM D955	0.3



Dental Guide

Biocompatible photopolymer for surgical guides, orthodontic appliances, splints, bite guards, and X-ray guides. Fast printing, high strength, easy polish, good elasticity, low water absorption. Safe and odorless for intraoral use.

- ✓

For tooth-supported and edentulous guides.
- ✓

High strength
- ✓

High transparency
- ✓

Dimensional stability

BASIC PERFORMANCE TABLE

Test Items	unit	Test Standards	values
Bending strength	MPa	ASTM D790	70.2~80.3
Flexural modulus	MPa	ASTM D790	1300~1500
Hardness	Shore D	ASTM D2240	85D
Notched impact strength	J/m	ASTM D256	110
Linear shrinkage rate	%	ASTM D955	0.8



Denture Bases

biocompatible, high strength, high surface hardness, low shrinkage. Low viscosity reduces waste and allows quick cleaning. Remains non-brittle after reaching full strength. Color stable, odorless, and tasteless.

- ✓

Denture base
- ✓

High strength
- ✓

Natural color
- ✓

Dimensional stability

BASIC PERFORMANCE TABLE

Test Items	unit	Test Standards	values
Bending strength	MPa	ASTM D790	63.7~70.3
Flexural modulus	MPa	ASTM D790	1300~1500
Hardness	Shore D	ASTM D2240	80D
Notched impact strength	J/m	ASTM D256	32~49
Linear shrinkage rate	%	ASTM D955	0.5



Dental Soft Splint

Dental resin for 3D printing occlusal splints and night guards.
Mechanical properties optimized for dental splint applications.

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High molding precision
- ✓

Easy casting
- ✓

Easy to put on and take off
- ✓

Resistant to corrosion

BASIC PERFORMANCE TABLE

Test Items	unit	Test Standards	values
Bending strength	MPa	ASTM D790	60~65
Flexural modulus	MPa	ASTM D790	1200~1600
Hardness	Shore D	ASTM D2240	70D
Notched impact strength	J/m	ASTM D256	32~49
Linear shrinkage rate	%	ASTM D955	0.5

